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| APPLICATION NO.  | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--|-----------------|----------------------|-------------------------|------------------|
| 09/988,994   | 11/21/2001      | Tetsuya Hori         | 500.40886X00            | 9525             |
| 20457  | 7590 03/03/2004 |                      | EXAMINER                |                  |
| ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET |                 |                      | GENCO, BRIAN C          |                  |
| SUITE 1800   |                 |                      | ART UNIT                | PAPER NUMBER     |
| ARLINGTON, VA 22209-9889   |                 |                      | 2615                    | 22               |
|  |                 |                      | DATE MAILED: 03/03/2004 | 4                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.                    | Applicant(s)                     |  |  |  |  |
|--|------------------------------------|----------------------------------|--|--|--|--|
| Advison, Action  | 09/988,994                         | Applicant(s) HORI ET AL.         |  |  |  |  |
| Advisory Action  | Examiner                           | Art Unit                         |  |  |  |  |
| v  | Brian C Genco                      | 2615                             |  |  |  |  |
| The MAILING DATE of this communication appe  | 1                                  | correspondence address           |  |  |  |  |
| THE REPLY FILED 09 February 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.   |                                    |                                  |  |  |  |  |
| PERIOD FOR REPLY [check either a) or b)]   |                                    |                                  |  |  |  |  |
| <ul> <li>a) The period for reply expires 3 months from the mailing date of the final rejection.</li> <li>b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.         ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).</li> </ul>  |                                    |                                  |  |  |  |  |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                    |                                  |  |  |  |  |
| 1. A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.   |                                    |                                  |  |  |  |  |
| 2. The proposed amendment(s) will not be entered because:  |                                    |                                  |  |  |  |  |
| (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);   |                                    |                                  |  |  |  |  |
| (b) ☐ they raise the issue of new matter (see Note below);   |                                    |                                  |  |  |  |  |
| (c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or   |                                    |                                  |  |  |  |  |
| (d)  they present additional claims without canceling a corresponding number of finally rejected claims.   |                                    |                                  |  |  |  |  |
| NOTE:  |                                    |                                  |  |  |  |  |
| 3. Applicant's reply has overcome the following rejection  | ction(s):                          |                                  |  |  |  |  |
| 4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s).  | I be allowable if submitted in a s | separate, timely filed amendment |  |  |  |  |
| 5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for application in condition for allowance because: Second of the condition of the condition for allowance because:   |                                    | sidered but does NOT place the   |  |  |  |  |
| 6. The affidavit or exhibit will NOT be considered be raised by the Examiner in the final rejection.   | cause it is not directed SOLELY    | to issues which were newly       |  |  |  |  |
| 7. For purposes of Appeal, the proposed amendmen explanation of how the new or amended claims w  |                                    |                                  |  |  |  |  |
| The status of the claim(s) is (or will be) as follows  | :                                  |                                  |  |  |  |  |
| Claim(s) allowed:  |                                    |                                  |  |  |  |  |
| Claim(s) objected to:  |                                    |                                  |  |  |  |  |
| Claim(s) rejected:   |                                    |                                  |  |  |  |  |
| Claim(s) withdrawn from consideration:   |                                    |                                  |  |  |  |  |
| 8. The drawing correction filed on is a) app   | proved or b) disapproved by        | the Examiner.                    |  |  |  |  |
| 9. Note the attached Information Disclosure Stateme  | ent(s)( PTO-1449) Paper No(s).     | ·                                |  |  |  |  |
| 10. Other:   |                                    |                                  |  |  |  |  |
|  |                                    |                                  |  |  |  |  |

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Applicant argues that the previously cited sections of Applicant's Admitted Prior Art, herein AAPA, do not disclose a control unit for generating single synthesized image data as argued on page 12 of the reply filed February 9, 2004.

In response, Examiner notes that on page 3, lines 11-14 and page 4, lines 11-15 AAPA explicitly discloses "Only the green (G) portions of the two image data thus acquired are extracted thereby to generate a **single** image composed of the green (G) portions" and "Specifically, as for green (G), as shown in Fig. 4D, eight image data having different relative positions of the color imaging device and the object image are acquired, and a **single** image data having only the (G) portions is generated" (emphasis added).

Applicant argues that Endsley does not disclose any concept or technique to generate a monochromatic image of high resolution in a short time using the image shift schemes.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In further clarifying Examiners combination of the references, Examiner notes that AAPA discloses generating high resolution images using a pixel shifting technique, however, as argued by Applicant, the AAPA discloses that this method is deficient in generating a monochromatic image in that in performing the pixel shifting technique it required a lot of time and processing in order to generate a high resolution monochromatic image. Endsley discloses a technique for generating a monochromatic image in a short amount of time, namely only outputting the green pixels. Therefore it would have been obvious to one of ordinary skill in the

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art as motivated by AAPA to generate a monochromatic image by outputting only green pixels in

order to reduce the amount of processing time and thus overcome the deficiencies of the prior art

method.

Applicant argues that the Examiner has not addressed the issue of the use of a Bayer

color filter.

In response, Examiner notes the rejection of claim 16 of Paper No. 17 wherein it was

noted that AAPA discloses the use of a Bayer filter in Fig. 4A and page 2, lines 14-19.

Applicant argues that the Examiner has not addressed the issue of the predetermined

pitch is 1/n and repeated shifting by the distance corresponding to 1/n.

In response, Examiner notes the rejection of claims 17 and 18 of Paper No. 17, wherein it

was shown that AAPA discloses shifting by 1/n in Fig. 4D wherein n=2.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian C. Genco who can be reached by phone at 703-305-7881 or

by fax at 703-746-8325. The examiner can normally be reached on Monday thru Thursday

7:30am to 4:30 pm and every other Friday 7:30am to 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Christensen can be reached on 703-308-9644. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the customer service office whose telephone number is 703-308-4357.

Brian C Genco

Art Unit 2615

February 18, 2004

ANDREW CHRISTENSEN SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2600